



Gulf of Mexico Harmful Algal Bloom Bulletin

Region: Texas

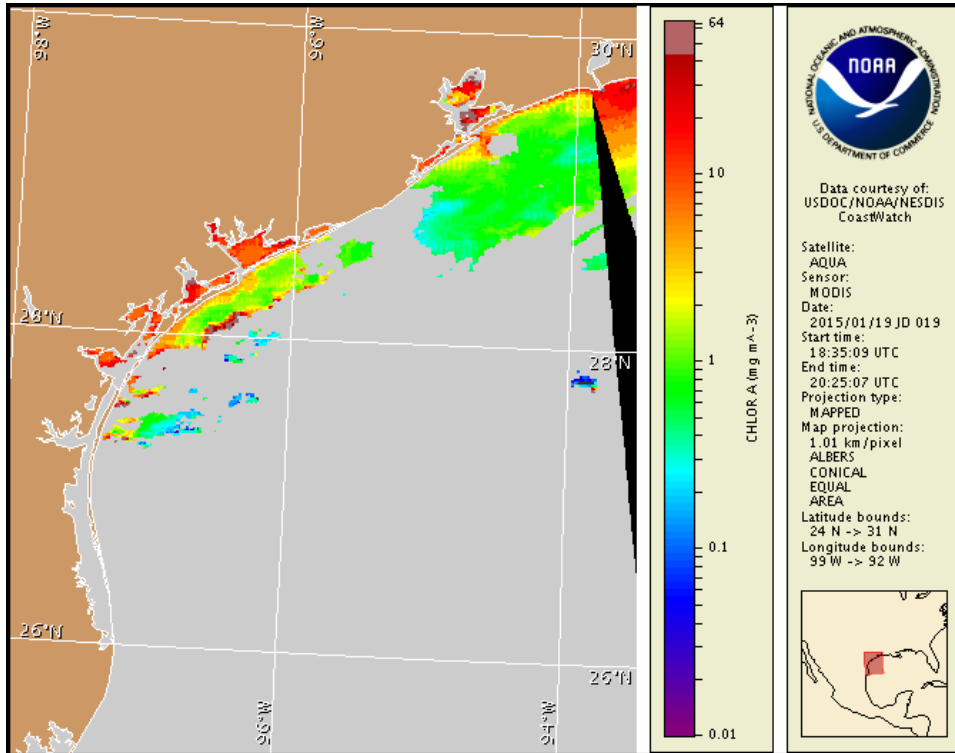
Tuesday, 20 January 2015

NOAA National Ocean Service

NOAA Satellite and Information Service

NOAA National Weather Service

Last bulletin: Monday, January 12, 2015



Satellite chlorophyll image with possible *K. brevis* HAB areas shown by red polygon(s), when applicable. Points represent cell concentration sampling data from January 11 to 19: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

http://tidesandcurrents.noaa.gov/hab/habfs_bulletin_guide.pdf

Detailed sample information can be obtained through the Texas Parks and Wildlife Department at:

<http://www.tpwd.state.tx.us/landwater/water/envconcerns/hab/redtide/status.phtml>

To see previous bulletins and forecasts for other Harmful Algal Bloom Bulletin regions, visit the NOAA Harmful Algal Bloom Operational Forecast System bulletin archive:

<http://tidesandcurrents.noaa.gov/hab/bulletins.html>

Conditions Report

Karenia brevis (commonly known as Texas red tide) ranges from not present to very low concentrations along the coast of Texas. No respiratory irritation is expected alongshore Texas Tuesday, January 20 through Monday, January 26.

Check http://tidesandcurrents.noaa.gov/hab/beach_conditions.html for recent, local observations.

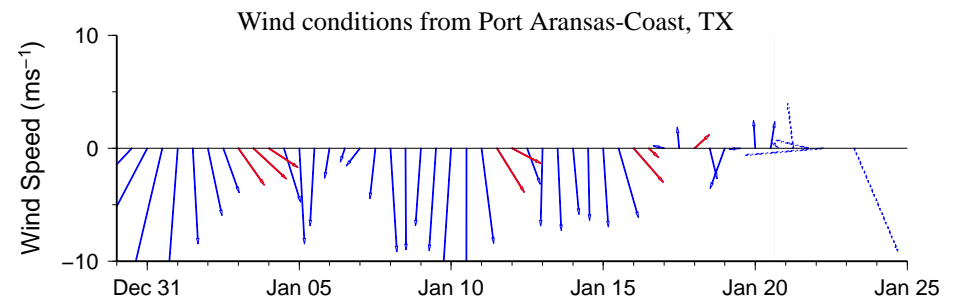
Analysis

Sampling from Texas A&M University's Imaging FlowCytobot, located on the Port Aransas ship channel, indicates that *Karenia brevis* concentrations range between 'not present' and 'very low a' (TAMU; 1/12-20). For information on area shellfish restrictions, contact the Texas Department of State Health Services.

Recent MODIS Aqua imagery (1/19, shown left) is partially obscured by clouds along the Texas coast, limiting analysis. Patches of elevated chlorophyll (2-10 $\mu\text{g/L}$) are visible, along- and offshore the Texas coast from Sabine Pass to the Port Aransas region. Elevated chlorophyll is not necessarily indicative of the presence of *K. brevis* and is most likely the artifact of clouds in the imagery and the resuspension of benthic chlorophyll and sediments along the coast.

Forecast models based on predicted near-surface currents indicate a potential maximum transport of 50 km south from the Port Aransas region from January 19-23.

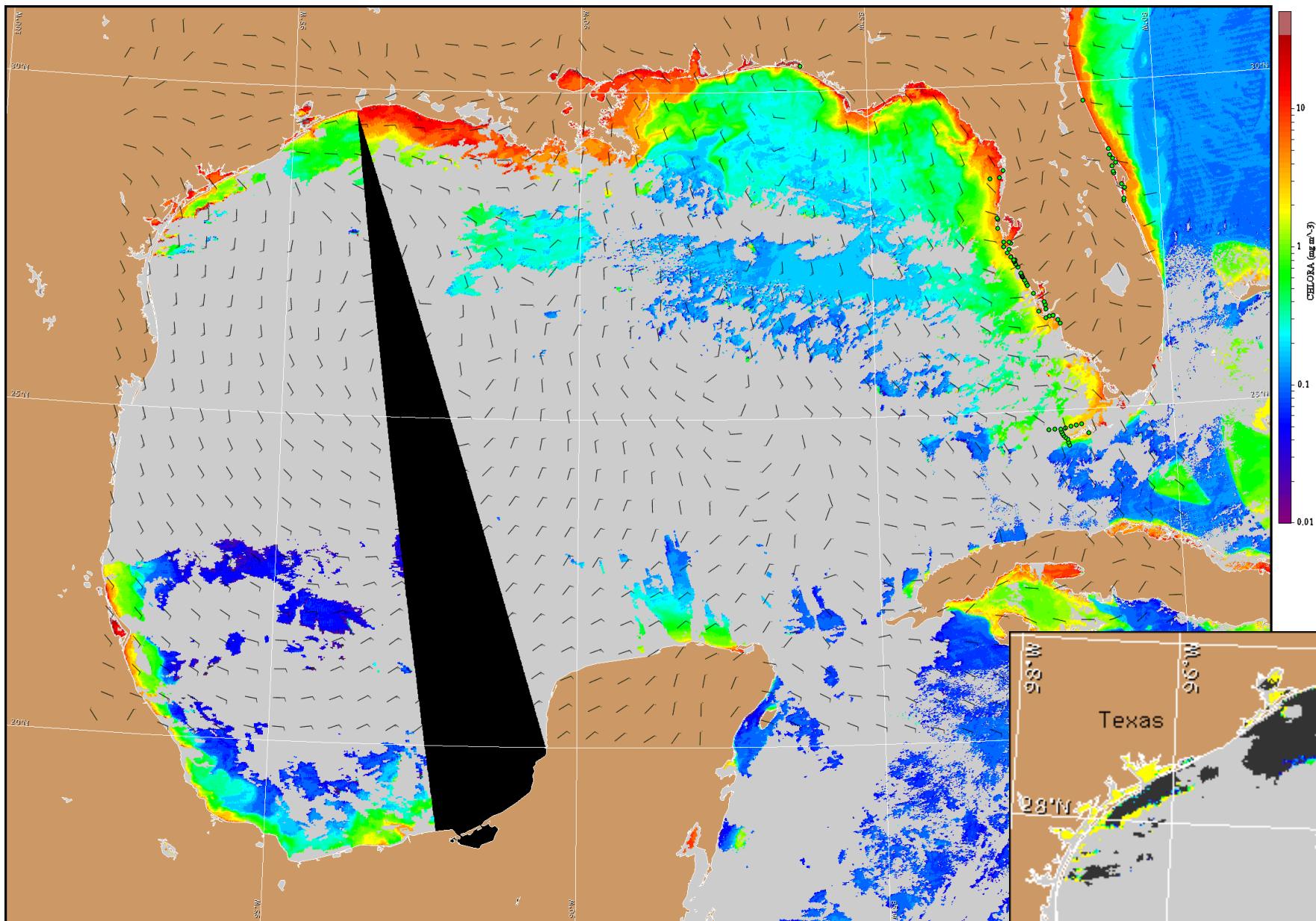
Kavanaugh, Keeney, Derner



Wind speed and direction are averaged over 12 hours from buoy measurements. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts. Wind observation and forecast data provided by NOAA's National Weather Service (NWS).

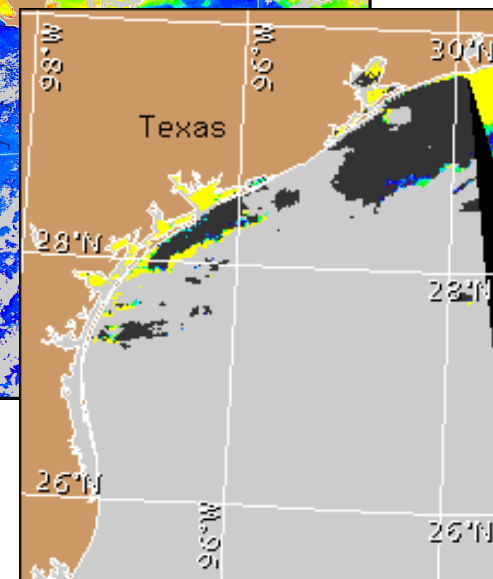
Wind Analysis

Port Aransas: Southwest winds (5-10kn, 3-5m/s) today becoming south winds late. Southeast to east winds (5-15kn, 3-8m/s) tonight through Thursday. North winds (15-30kn, 8-15m/s) Thursday afternoon through Friday decreasing to 10-15kn (5-8m/s) after midnight. Northwest to west winds (5-10kn) Saturday.



Satellite chlorophyll image and forecast winds for January 21, 2015 06Z with points representing cell concentration sampling data from January 11 to 19: red (high), orange (medium), yellow (low b), brown (low a), blue (very low b), purple (very low a), pink (present), and green (not present). Cell count data are provided by Texas Parks and Wildlife Department. For a list of sample providers and a key to the cell concentration categories, please see the HAB-OFS bulletin guide:

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Verified and suspected HAB areas shown in red. Other areas of high chlorophyll concentration shown in yellow (see p. 1 analysis for interpretation).